CLAIMS

1   1. A trouble ticketing system for supporting multiple service providers, each having

2   end-users connected to a common network, comprising:

3   a digital repository populated with

4   service provider entries including information about a first service provider of

5   the multiple service providers and other information about a second service provider of the

6   multiple service providers,

7   end-user entries including information about end-users of the first service

8   provider and other information about end-users of the second service provider, each of the

9   end-user entries being associated with at least one of the service provider entries, and

10   trouble ticket entries including trouble ticket information including trouble

11   ticket status information, each of the trouble ticket entries being associated with at least one

12   of an end-user entry and a service provider entry;

13   a processor; and

14   a computer readable medium encoded with processor readable instructions that when

15   executed by the processor implement,

16   a common trouble ticket interface mechanism configured to provide a single

17   user interface for the first service provider and the second service provider to access entries in

18   the digital repository, the first service provider having access to trouble ticket entries

19   associated with the first service provider and end-user entries associated with the first service

20   provider and the second service provider having access to trouble ticket entries associated

21   with the second service provider and end-user entries associated with the second service

22   provider, and

23   a trouble ticket tracking mechanism configured to access and maintain trouble

24 ticket entries in the digital repository.

1   2. The system of Claim 1, wherein the common trouble ticket interface mechanism is

2 further configured to provide secure access to the entries in the digital repository.

1   3. The system of Claim 1, wherein the common trouble ticket interface mechanism

2 comprises a web portal.

1   4. The system of Claim 1, wherein the digital repository comprises a database.

1   5. The system of Claim 1, wherein the common network comprises a network

2 dedicated to broadband data transport services.

1   6. The system of Claim 5, wherein the data transport services comprise at least one of

2 Internet access, voice over IP, and video on demand.

1   7. The system of Claim 1, wherein the common network comprises an open access

2 network.

1   8. The system of Claim 1, wherein at least a portion of the common network

2 comprises an Internet protocol network.

1   9. The system of Claim 1, wherein at least a portion of the common network is a

2 hybrid fiber optic coaxial network.

1   10. The system of Claim 1, wherein the at least one of the multiple service providers

2 comprises an Internet service provider.

1   11. The system of Claim 1, wherein at least a portion of the common network

2 comprises a Data Over Cable Service Interface Specification network.

1   12. The system of Claim 1, wherein at least a portion of the common network

2 comprises a European Data Over Cable Service Interface Specification network.

1   13. A trouble ticketing method for supporting multiple service providers, each having

2 end-users connected to a common network, comprising:

3   populating a digital repository with

4   service provider entries including information about a first service provider of

5 the multiple service providers and other information about a second service provider of the

6 multiple service providers,

7   end-user entries including information about end-users of the first service

8 provider and other information about end-users of the second service provider, each of the

9 end-user entries being associated with at least one service provider entry, and

10   trouble ticket entries including trouble ticket information including trouble

11 ticket status information, each of the trouble ticket entries being associated with at least one

12 of an end-user entry and a service provider entry;

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13   providing a single user interface for the first service provider and the second service

14   provider to access entries in the digital repository via a common trouble ticket interface

15   mechanism, the first service provider having access to trouble ticket entries associated with

16   the first service provider and end-user entries associated with the first service provider and

17   the second service provider having access to trouble ticket entries associated with the second

18   service provider and end-user entries associated with the second service provider; and

19   accessing and maintaining trouble ticket entries in the digital repository.

1   14. The method of Claim 13, further comprising the step of:

2   configuring the common trouble ticket interface mechanism to provide secure access

3 to the entries in the digital repository.

1   15. The method of Claim 13, further comprising the step of:

2   configuring the common trouble ticket interface mechanism as a web portal.

1   16. The method of Claim 13, wherein the common network comprises a network

2 dedicated to broadband data transport services.

1   17. The method of Claim 16, wherein the data transport services include at least one

2 of Internet access, voice over IP, and video on demand.

1   18. The method of Claim 13, wherein the common network comprises an open access

2 network.

1   19. The method of Claim 13, wherein at least a portion of the common network

2 comprises an Internet protocol network.

1   20. The method of Claim 13, wherein at least a portion of the common network

2 comprises a hybrid fiber optic coaxial network.

1   21. The method of Claim 13, wherein at least one of the multiple service providers

2 comprises an Internet service provider.

1   22. The method of Claim 13, wherein at least a portion of the common network

2 comprises a Data Over Cable Service Interface Specification network.

1   23. The method of Claim 13, wherein at least a portion of the common network

2 comprises a European Data Over Cable Service Interface Specification network.

1   24. A trouble ticketing system for supporting multiple service providers, each having

2 end-users connected to a common network, comprising:

3   means for populating a digital repository with

4   service provider entries including information about a first service provider of

5 the multiple service providers and other information about a second service provider of the

6 multiple service providers,

7   end-user entries including information about end-users of the first service

8 provider and other information about end-users of the second service provider, each of the

9 end-user entries being associated with at least one service provider entry, and

10   trouble ticket entries including trouble ticket information including trouble

11   ticket status information, each of the trouble ticket entries being associated with at least one

12   of an end-user entry and a service provider entry;

13   means for the first service provider and the second service provider to access entries

14   in the digital repository, the first service provider having access to trouble ticket entries

15   associated with the first service provider or end-users of the first service provider and the

16   second service provider having access to trouble ticket entries associated with the second

17   service provider or end-users of the second service provider; and

18   means for accessing and maintaining trouble ticket entries in the digital repository.

1   25. A computer program product, comprising:

2   a computer storage medium; and

3   a computer program code mechanism embedded in the computer storage medium for

4   causing a processor to provide a common trouble ticketing capability supporting multiple

5   service providers, each having end-users connected to a common network, the computer

6   program code mechanism having,

7   a first computer code device configured to maintain service provider information,

8   end-user information, and trouble ticket status information in a database, the end-user

9   information including an association between each end-user and at least one service provider,

10   the trouble ticket status information including an association between each trouble ticket and

11   at least one of an end-user and a service provider;

12   a second computer code device configured to provide a common trouble ticket user

13   interface for a first service provider and a second service provider to access entries in the

14   database, the first service provider having access to trouble ticket status information

15   associated with at least one of the first service provider and end-users of the first service

16   provider and the second service provider having access to trouble ticket status information

17   associated with at least one of the second service provider and end-users of the second

18   service provider; and

19   a third computer code device configured to maintain trouble ticket status information

20   in the database.

1   26. The computer program product of Claim 25, wherein the second computer code

2   device is further configured to provide secure access to the information in the database.

1   27. The computer program product of Claim 25, wherein the second computer code

2   device comprises a web portal.

1   28. The computer program product of Claim 25, wherein the common network

2   comprises a network dedicated to broadband data transport services.

1   29. The computer program product of Claim 28, wherein the data transport services

2   comprise at least one of Internet access, voice over IP, and video on demand.

1   30. The computer program product of Claim 25, wherein at least a portion of the

2   common network comprises an open access network.

1   31. The computer program product of Claim 25, wherein at least a portion of the

2 common network comprises an Internet protocol network.

1   32. The computer program product of Claim 25, wherein at least a portion of the

2 common network comprises a hybrid fiber optic coaxial network.

1   33. The computer program product of Claim 25, wherein at least one of the multiple

2 service providers comprises an Internet service provider.

1   34. The computer program product of Claim 25, wherein at least a portion of the

2 common network comprises a Data Over Cable Service Interface Specification network.

1   35. The computer program product of Claim 25, wherein at least a portion of the

2 common network comprises a European Data Over Cable Service Interface Specification

3 network.

1   36. A method for trouble shooting a common network supporting multiple service

2 providers, each having end-users connected to the common network, comprising the steps of:

3   creating a first trouble ticket having a status of open indicating a problem with the

4 common network;

5   storing the first trouble ticket in a database;

6   associating the first trouble ticket with a first service provider of the multiple service

7 providers in the database;

8   creating a second trouble ticket having a status of open indicating another problem

9   with the common network;

10   storing the second trouble ticket in the database;

11   associating the second trouble ticket with a second service provider of the multiple

12   service providers in the database;

13   querying the database for all trouble tickets having a status of open; and

14   updating a status of the first trouble ticket to closed in the database.

1   37. The method of Claim 36, wherein the step of querying comprises querying the

2   database for all trouble tickets associated with the first service provider.

1   38. A method for trouble shooting a common network supporting multiple service

2   providers, each having end-users connected to the common network, comprising the steps of:

3   creating a first trouble ticket having a status of open indicating a first problem for a

4   first impacted end-user;

5   storing the first trouble ticket in a database;

6   associating the first trouble ticket with a first service provider of the multiple service

7   providers in the database;

8   creating a second trouble ticket having a status of open indicating a second problem

9   for a second impacted end-user;

10   storing the second trouble ticket in the database;

11   associating the second trouble ticket with a second service provider of the multiple

12   service providers in the database;

13   querying a database for the first trouble ticket having a status of open and indicating a

14 problem for the first impacted end-user;

15   determining a location on the common network of the first impacted end-user;

16   determining a network path between a common data center and the first impacted

17 end-user;

18   establishing communications between the common data center and the first impacted

19 end-user;

20   acquiring device status information from the first impacted end-user by the common

21 data center;

22   correcting the problem;

23   updating the first trouble ticket to have a status of closed in the database.

1   39. The method of Claim 38, further comprising the step of:

2   notifying the first service provider that the first trouble ticket has been closed.